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Patent No. **Serial No.** **Patent Date** **US Filing Date** **Confirmation No.** **Attorney Docket No.**

7,535,448 B2 10/072,171 May 19, 2009 February 7, 2002 1313 0553-0302

Respectfully Submitted,



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US007535448B2

(12) **United States Patent**
Hiroki

(10) **Patent No.:** US 7,535,448 B2
(45) **Date of Patent:** May 19, 2009

(54) **LIQUID CRYSTAL DISPLAY DEVICE, AND
METHOD OF DRIVING THE SAME**

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(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 108 days.

(21) Appl. No.: 10/072,171

(22) Filed: Feb. 7, 2002

(65) **Prior Publication Data**

US 2002/0109659 A1 Aug. 15, 2002

(30) **Foreign Application Priority Data**

Feb. 8, 2001 (JP) 2001-032543

(51) **Int. Cl.**

G09G 3/36 (2006.01)

G09G 5/10 (2006.01)

(52) **U.S. Cl.** 345/89; 345/690

(58) **Field of Classification Search** 345/89;

345/690, 691, 94, 95, 100, 206, 99

See application file for complete search history.

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(57) **ABSTRACT**

In driving a liquid crystal display device, respective voltages of picture signals supplied in subframe periods are changed so as to enlarge a voltage difference between a gradation voltage of a picture signal supplied in the first subframe period and a gradation voltage of a picture signal supplied in the second subframe period.

22 Claims, 12 Drawing Sheets

